## Determination: NFA

# PA/VSI Or RFA FILE REVIEW CHECKLIST

Facil	ity Nar	me: Joh	nson Controls (Control Prod.) (Tocon Holdings)
EPA	ID: IN	D 009	549 593 City: Goshen State: IN
Nam	e of Re	eviewer	: Maureen McHugh Date of Review: 7/14/08
1	Yes	No	Is this a one folder site?
2	Yes	No	Are there Superfund files for this site?
3	Yes	No	Did you Read the Executive Summary?
			There are: SWMUs and AOCs at this site.
4	Yes	No	Did you review the regulatory history? (no pa/vsi)
5	Yes	No	Does the facility have interim status or a permit?
		nd (Classical Beautiful	This facility is a: _X_ (CE)SQG,LQG, orLess than 90 day.
6	Yes	No	Was the Facility closed per RCRA? RCRAInfo 380 (1992 & 2000)
			If Yes, was the closure: _X_ CC, or CIP.
7	Yes	No	Are there documented (historical) releases? Briefly describe on Page 2.
8	Yes	No	Were there releases identified during the inspection? Briefly describe on Page 2.
9	Yes	No	Do you agree with the Conclusions and Recommendations?
			If No, briefly describe on Page 2.
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As a	result o	of your 1	eview of the PA/VSI or RFA file, please classify this site as:
			corrective action recommended or warranted: These are sites that closed the regulated units IUs or AOCs at the site did not warrant any further corrective action (no historic releases or
			observed during the Visual Site Inspection).
SW	vestiga MU or 1	tion that AOC and	ion Required: Soil or sediment sampling or groundwater sampling or monitoring or any type was recommended in the report in response to a documented or observed release at any d where such investigation, whether being addressed during the inspection or after, does not documentation in the facility record files.
	Mo	re Infon	nation Needed: There is no RFA, PA/VSI or RCRA closure information available.

# PA/VSI Or RFA FILE REVIEW CHECKLIST

Notes
RCRA-regulated storage tank (xylene, methyl ethyl ketone, methyl alcohol mixed with waste oil) removed and replaced with 2 smaller tanks. Tanks went through closure in 2000.
Briefly describe any documented (historical) releases for any SWMU or AOC recorded in the report. For each release, please identify the SWMU or AOC and a one or two line description of release.
Briefly describe any releases observed during the inspection for any SWMU or AOC recorded in the report. For each release, please identify the SWMU or AOC and a one or two line description of release.
PA/VSI Recommendations
Closure- completed in1992 & 2000



#### CEI TRIP REPORT MEMORANDUM

Date:

December 20, 1990

To:

Johnson Controls, RCRA File

IND 009 549 593, Goshen, Elkhart County, IN

From:

Gail Artrip, Metcalf & Eddy, Inc.

TES X Contractor

Subject: Trip Report for the CEI/LDR Inspection of November 26, 1990

On Monday, November 26, 1990, unscheduled RCRA compliance evaluation and land disposal restrictions (CEI/LDR) inspections were performed by Region V U.S. Environmental Protection Agency (EPA) representatives at the Johnson Controls facility, located at 1302 E. Monroe St., Goshen, Elkhart County, Indiana. These inspections were conducted under the Technical Enforcement Support (TES) X contract, Work Assignment No. R05039. The facility was represented by Mr. Emery Lee Heck, manufacturing engineer and Mr. Larry Martin, hazardous waste handler. U.S. EPA was represented by Mr. James Myers and Ms. Gail Artrip of Metcalf & Eddy (M&E).

#### **Pre-Inspection File Audit**

A pre-inspection file audit revealed that Johnson Controls originally notified the Indiana Department of Environmental Management (IDEM) of their treatment and storage activities on August 18, 1980. They filed a Part A application on October 29, 1980 for container and tank storage and wastewater treatment. It was later determined that their wastewater treatment activities (under NPDES permit) were

exempt from RCRA regulation. Consequently on April 11, 1987 they submitted a revised Part A application naming only the container storage function. It appears however, that they continued to operate a RCRA-regulated storage tank (xylene, methyl ethyl ketone, methyl alcohol mixed with waste oil) until May of 1988 when it was cleaned, removed from the site and replaced by two smaller waste oil tanks. This first tank never went through RCRA closure. Johnson Controls claims that the practice of mixing RCRA-regulated wastes with the waste oil has ceased, thereby making the storage tanks no longer a RCRA-regulated process. IDEM called for the submittal of a Part B permit on May 25, 1988. Johnson Controls decided instead to pursue closure of all storage units and is presently attempting to obtain approval of a closure plan. They currently hold interim status but are trying to gain status as a large quantity generator only.

IDEM's most recent inspection took place on March 22, 1989 at which time Johnson Controls was found to be in compliance. Previous inspections were conducted on January 10, 1985 and October 21, 1986. Both resulted in the issuance of Notices of Violation. Violations included inadequate personnel training and inspection schedule, inaccurate operating record, containers stored open, not marked 'Hazardous Waste' and lacking dates of accumulation, and storage in excess of their permit conditions.

A 1985 contingency plan and a 1989 closure plan were reviewed. Newer copies of each were reviewed at the facility during the inspection. Recent Biennial Reports were reviewed, indicating that their most common hazardous wastes are F001, F002, F003, F005 (spent solvents), F006 (electroplating sludge), F007 (spent cyanide plating solutions), F008 (plating bath sludges with cyanides), D001 (ignitable) and D002 (corrosive).

## **Inspection Findings**

Johnson Controls' Goshen facility manufactures and distributes automatic environmental control devices such as thermostats, barometers, etc. Processes include plating, machining, painting, stamping, light assembly and degreasing. The site is approximately 12 acres with 4.5 acres under roof.

Johnson Control representative Mr. Heck indicated that over the past few years the facility has been attempting to eliminate/minimize several of their hazardous wastes and gave the following information:

- June 1, 1989 reduced freon (trichlorofluoroethane) in plant processes except for roof air conditioners
- Nov. 4, 1989 eliminated zinc cyanide electroplating
- Nov. 22, 1989 reduced caustics (D002) and methyl ethyl ketone stripper by replacing with burn-off oven.
- Apr. 10, 1990 eliminated cadmium cyanide electroplating.
- May 24, 1990 introduced powder paint line which reduced the use of methyl ethyl ketone and paint-related waste by 95%.
- Currently trying to reduce trichloroethylene waste

They also hope to eliminate their F006 waste once they're certain that all cyanide is completely out of the system.

Hazardous wastes generated and their disposition include the following:

- F001 Trichloroethylene still bottoms from distillation unit [sent to Petro Chem Processing (Detroit) for fuel blending]
- F002 1,1,1 Trichloroethane still bottoms from distillation unit [sent to Petro Chem Processing (Detroit) for fuel blending]
- F002 1,1,1 Trichloroethane spent absorbent pads from the clean up of minor spillage around machinery [sent to Petro Chem Processing (Detroit) for fuel blending]
- F002 1,1,1 Trichloroethane spent Floor Dry from the clean up of minor spillage around machinery [sent to Eldorado, AK for incineration]

- F002 Trichlorofluoromethane/water/oil mixture from air conditioning system [sent to Petro Chem Processing (Detroit) for fuel blending]
- F003 Waste Alcohol from the washing of soldering test pots [sent to PetroChem Processing (Detroit) for fuel blending]
- F005 Methyl Ethyl Ketone from paint removal [sent to Petro Chem Processing (Detroit) for fuel blending]
- F006 zinc electroplating filter press cake [sent to Michigan Disposal (Belleville) for land disposal]
- D001 Naphtha from parts wasters in the maintenance area [recycled by Safety Kleen, South Bend, IN]
- D002 Caustics from hot paint stripper prior to implementation of powder paint line and burn-off oven. Some liquid paints are still in use resulting in continued minimal generation of this waste [sent to Michigan Disposal (Belleville) for land disposal]
- D002 Caustics recent one-time generation from the clean-out of cadmium and zinc electroplating lines [sent to Cyanochem (Detroit) for treatment]

Other non-RCRA wastes handled at the facility include:

waste oil (serviced by Berreth Oil - Mishwaka)

asbestos (most recently handled by Wayne Disposal in March 1990)

brass shavings (handled by Omni Source for reclamation)

copper shavings (handled by Omni Source for reclamation)

steel shavings (handled by Omni Source for reclamation)

cast iron shavings (handled by Omni Source for reclamation)

PCBs (most recently handled as a TSCA-waste by General Electric - Chicago)

empty drums (triple rinsed - handler unknown)

At present, Johnson Controls is operating as a large quantity generator with less than ninety (90) day container storage only. They are in the process of obtaining approval for their closure plan. Correspondence has been exchanged between IDEM and Johnson Controls in an effort to clarify exactly which portions of the site require closure in accordance with 329 IAC 3-21. The confusion has resulted from the fact that most/all of the former container and tank storage areas have been demolished over the last ten years and some have new structures over their former locations.

The facility operates two distillation units which result in the generation of spent solvent still bottom wastes. One cleans F002 (1,1,1-trichloroethane) for reuse. The other, also involving a vapor degreasing unit, cleans F001 (trichloroethylene) for reuse. Each has a satellite accumulation area adjacent to it.

Johnson Controls operates a continuous batch-type wastewater treatment process on the premises to treat their zinc and cadmium electroplating wastes. According to Mr. Heck, over the past year they have removed both their zinc cyanide and cadmium cyanide electroplating wastes by substituting an alkaline zinc into their process. At present the resulting filter press cake is still handled as a F006 waste. It is their intent to reanalyze the waste after they're certain that all cyanide is completely out of the system. They believe that the modified wastestream will no longer be considered RCRA-hazardous.

The facility has a small laboratory on the premises which tests the stream from the wastewater treatment plant. It generates no hazardous waste. The spent sample materials are run through the wastewater treatment plant.

In the hazardous waste storage building (less than 90-day) were six (6) five gallon containers of soldering sludge, each dated September 11, 1989. According to Mr.

Heck, analysis by Great Lakes Environmental is presently underway to determine if they're hazardous. If so, they will then be properly disposed of. Mr. Heck indicated that the reason they've delayed on analyzing this waste is because they believe that the material contains quite a bit of silver and it was their objective to identify some way of reclaiming the silver prior to disposal. They were unable to accomplish this and will now dispose of the material, once analyzed.

### **Post-inspection Events**

Subsequent to the inspection, Mr. Heck sent, via mail, materials in an effort to answer questions which remained at the close of the inspection. He also sent a copy of the facility's waste analysis plan which could not be located at the time of the inspection. The following were included: 1) a map of Johnson Control site with the hazardous waste building marked; 2) information regarding the Montreal Protocol and Dow Chemical USA Methyl Chloroform to support their effort at CFC waste minimization; 3) waste analysis plan. This was intended to suffice for the requirements of 40 CFR 268.7(b), 329 IAC 3-16-4(b) and 40 CFR 265.13(b) revisions. However it was found to be lacking in many areas; 4) Manifest No. MI 2131017 dated 10/19/90 with dichloromethane including analytical results and approval for shipping; 5) analysis of waste oil by Safety Kleen. This appears to that RCRA-regulated wastes (trichlorofluoroethane trichloroethane) may occasionally be mixed into their non-permitted 500-gal. and 1000-gal. waste oil tanks.

These materials are provided as attachments to this report. The checklists were completed at the time of the inspection and have not been modified to reflect the receipt of these materials. However, violations cited in this report took into account this supplementary information.

#### **CEI Violations**

1. The designated Emergency Coordinator does not appear to be adequately familiar with information required to respond to an emergency. [329 IAC 3-18-6]

- 2. Numerous personnel training and record keeping inadequacies including:
  - a) no job titles for the positions related to hazardous waste management
  - b) no names of employees filling each job title
  - c) no job descriptions for each position related to hazardous waste management
  - d) no written description of the entire hazardous waste management training curriculum, both introductory and continuing
  - e) no records that demonstrate that all pertinent employees have completed their training
  - f) questionable annual refresher training sufficiency [329 IAC 3-16-7]
- 3. The facility's written waste analysis plan was found to be inadequate in several areas including:
  - a) the parameters for which each hazardous wastestream will be analyzed.
  - b) the frequency of testing.
  - c) the test methods and sampling methods to be used [329 IAC 3-16-4(b)]
- 4. Both the wastewater treatment plant and the 1,1,1-trichloroethane distillation unit satellite accumulation areas had more than 55 gallons of hazardous waste present without dating the excess amount. [329 IAC 3-9-5(c)2]
- 5. There were two drums present in the wastewater treatment plant satellite accumulation area which were lacking lids. [329 IAC 3-23-4(a)]
- 6. There were two drums present in the 1,1,1-trichloroethane distillation satellite accumulation area which had funnels in them while not being filled, one of which had been overfilled and had waste solvent on top of the lid. [329 IAC 3-23-4(a)]
- 7. Three drums of absorbent pads (F002) in the hazardous waste storage building lacked dates of accumulation. [329 IAC 3-9-5]
- 8. There were spent absorbent pads piled on some drums in the northeast section of the plant. [329 IAC 3-9-5]

9. D001 wastes containing greater than 500ppm lead were not recognized as D008 as well. [329 IAC 3-7-2]

#### LDR Violations

- 1. Adherence to storage prohibitions could not be verified for three (3) drums of absorbent pads (F002) in the hazardous waste storage building because they lacked accumulation dates. [40 CFR 268.50 (a)(2)]
- 2. Prohibition levels/treatment standards for California list constituents (HOCs, cyanides, lead) were not recognized in D001 and D002 wastes. [40 CFR 268.7 (a)]
- 3. LDR notifications were not provided for wastestreams containing California list constituents. [40 CFR 268.7(a)].

## Conclusions/Recommendations

Based on inspection findings it appears that Johnson Controls in operating as a large quantity generator. While the facility appears to be making a strong effort at waste minimization, it continues to fall short of compliance in several areas, many of which represent repeat violations such as inadequate personnel training and improper container management. Until a closure plan is approved and closure complete, Johnson Controls is still viewed as an interim status facility; consequently the inadequacy of their written waste analysis plan is a violation.

The facility should modify the manner in which they maintain personnel training records to render them more readily inspectable. This would greatly simplify the verification of adequacy. A written description of the personnel training curriculum, both introductory and continuing, should be developed.

Satellite accumulation area container management practices should be tightened up to avoid such violations as open containers, funnels in lids, drums lacking dates and drum overfilling.

Present in the less than 90 days storage building were two drums of virgin materials, one containing sodium hydrosulfide and one containing polymer/water, which were incorrectly labelled as 'Hazardous Waste'. This practice should be stopped.

Areas of concern include the 1000- and 500-gal waste oil tanks. Although we could not confirm with certainty that the tanks are occasionally holding RCRA-regulated wastes, particularly trichlorofluoromethane (F002) and 1,1,1-trichloroethane (F002) mixed with the waste oil, there were inconsistencies in some of the waste analysis data and manifests which suggested that this practice may be occurring from time to time. If this could be verified, then Johnson Controls would be out of compliance with their revised Part A permit which doesn't have tank storage (S02) as a permissible process. These tanks are not managed (i.e. inspection schedules, dates of accumulation, etc.) as RCRA-regulated tanks.

Another questionable practice at the facility takes place in the wastewater treatment area. Presently, at one point in their wastewater treatment process, they decant liquid from the surface of a baffled tank and temporarily store it in several 55-gallon drums which bear an F006 label (undated). The sludge is then removed from the bottom of this tank, run through the filter press and the resulting cake is placed in 55-gallon drums also labelled as F006 in the adjacent satellite accumulation area. The decanted liquid is then pumped back into the wastewater system for additional treatment. The practice of labelling the drums as F006 into which the decanted liquid is placed, albeit temporarily, is erroneous and should be changed. The liquid is not an F006 material, nor is it a waste.

It is recommended that a Notice of Violation be issued for violations named in this report and that an Enforcement Follow-up inspection be conducted, with an effort aimed at verifying the status of some of the questionable practices and areas of concern described.

### **Executive Summary**

Johnson Controls' Goshen Facility manufactures and distributes automatic environmental control devices. Several wastes including F001, F002, F003, F005 (spent solvents), F006 (electroplating sludge), D001 (ignitable), and D002 (caustic) currently result from various processes conducted at the plant. They are presently attempting to gain approval of their closure plan for storage areas which they no longer use. Once the facility's previous storage areas are certified closed, they will become a large quantity generator only. A Nov. 26, 1990 CEI/LDR inspection by U.S. EPA representatives was conducted. Violations observed included inadequate personnel training and recordkeeping, an inadequate waste analysis plan, deficient waste management practices and improper characterization of wastes. Some of these are repeat violations.

## CERTIFICATION REGARDING POTENTIAL RELEASES FROM SOLID WASTE MANAGEMENT UNITS

FACIL	ITY NAME:	Johnson Contr	ols, Inc.,	CPD Division	
EPA I.	). NUMBER:	IND009549593		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-
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